17. The particle calorimeter of claim 1 further comprising a means for determining a strike position of a particle by measuring a shape of the temperature change versus a time function, wherein time signatures of the temperature change function to yield position and total energy of the particle.

18. A method of measuring the energy and a strike position of a particle comprising:

superimposing a particle absorber layer upon a base layer thereby providing an efficient heat transfer between the 10 absorber and base layers;

said particle absorber layer further comprising a composition selected from the group consisting of normal metals, insulators, semi-metals, and super-conductors;

measuring a temperature change in the base layer, <sup>15</sup> wherein the temperature change functions to detect the particle energy striking the particle absorber layer;

said base layer further comprising a composition selected from the group consisting of normal metals not in a superconducting state;

placing said particle calorimeter in an ambient environment comprising a cryogenic temperature;

said base layer further comprising a means for providing a weak thermal contact with a super cold substrate, functioning to enable the base layer to react to minute temperature changes to incoming particles; and

determining a strike position of a particle by measuring a shape of the temperature change versus a time function, wherein time signatures of a temperature change function to yield position and total energy data.

\* \* \* \* :